**Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554**

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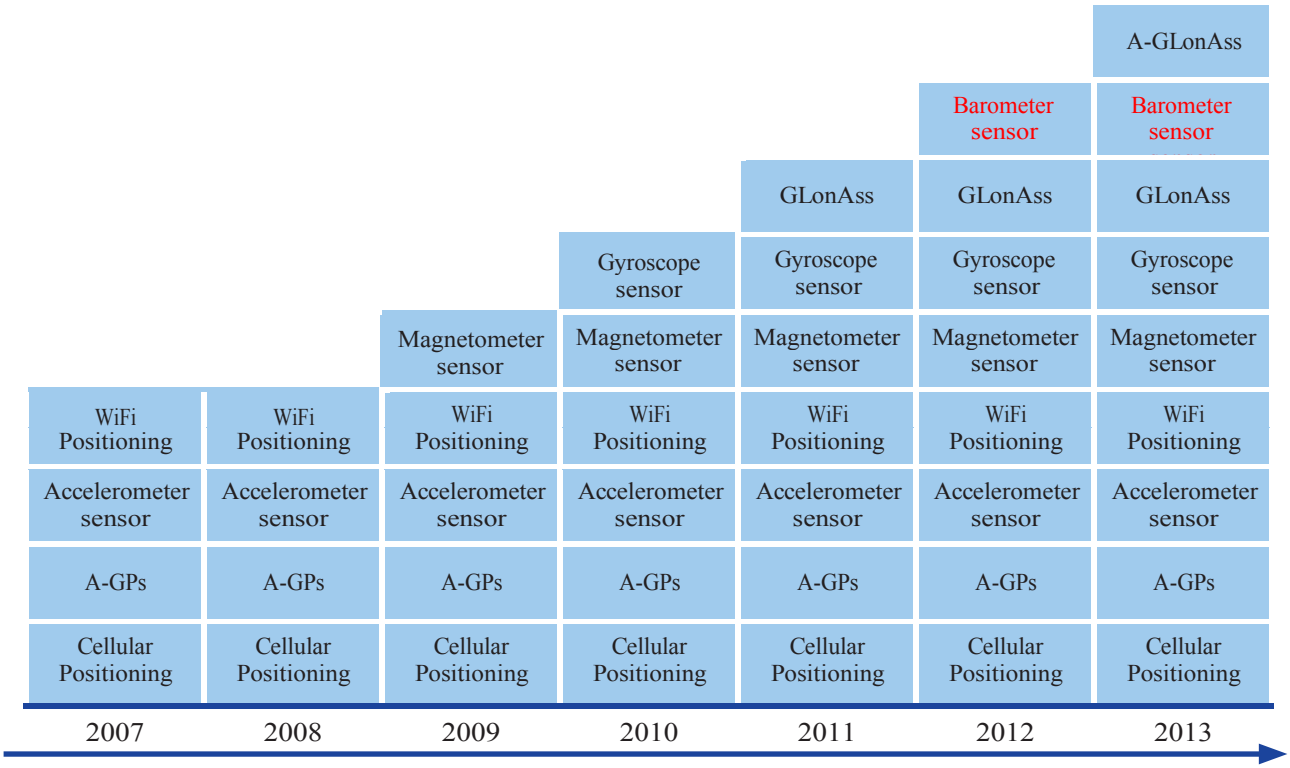
| In the Matter of | ) | |
| Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications | ) | PS Docket No. 11-153 |
| Framework for Next Generation 911 Deployment | ) | PS Docket No. 10-255 |
| Public Safety and Homeland Security Bureau Seeks Comment on the Legal and Statutory Framework for Next Generation 9-1-1 Advancement Act of 2012 | ) | PS Docket No. 12-333 |

**COMMENTS OF XYVERIFY CORP.**

As explained in Notice of Inquiry filed earlier in the Commission's pending rulemaking on Next Generation 911 ("NG911")[1], new location-based technologies and applications from network operators will make the delivery of real-time, automatic location information more challenging to reliably discover their indoor location information to ensure that location information discovered, and reported is better validated. Since the Inquiry, new location intelligence technology and techniques, largely based on the rapid growth of Smart Phone mobile sensors ("MEMS") have created new opportunity to improve location reporting by adding the capability to report altitude via the altimeter sensors now being included as an indicator of the estimated building height and floor number by altimeter reporting now possible in many new mobile consumer devices. Such barometric sensor reporting enhancements can not only provide a street address, but also add the approximate E911 responder floor. These comments are to share the potential of including these new indoor altitude sensing and reporting capabilities, made possible by further application and development, that can enhance location reporting in buildings within urban areas that are multi-floor indoor structures where lat/lon location reporting (with corresponding geo-coded address and map reporting) alone is not

In short, both industry and public safety should consider and further evaluate the potential of mobile phone barometric pressure altitude reporting sensors (A/K/A Altimeters) being integrated in many smart phones as measures necessary for the deployment of a long-term and more comprehensive NG911 system. If current trends smartphone sensor trends continue, location-based and height-enabled communications reporting to NG911-capable PSAPs will be widely available within a reasonable period as altimeter/pressure sensors ("MEMS" chip) are increasing included as standard into mobile communication devices in light of current industry and technology trends.

### A. Current and Industry Trends For Reporting Building Height/Floor Caller Location Based on Evolution of Location Technologies for Smartphones[2]




[2] *Figure 1: Evolution of Location Technologies for Smartphones (illustrates technology evolution - not specific to an actual device).*

*Source: An Overview of Hybrid Location Technologies, Enabling Accurate Everywhere Location, page 2, ©2012 Spirent www.spirent.com*

In a white paper from Spirent entitled, *Overview of Hybrid Location Technologies, Enabling Accurate Everywhere Location*, page 3, the industry and technology trend for enhanced and alternate positioning to augment GPS positioning explains:

"*Alternate positioning technologies may be used to either replace GPS or augment the GPS positioning. Existing technologies typically used for other purposes of the handset…may be used for positioning to improve availability. The principle of using multiple positioning technologies independently or in combination to derive the user position is often called "hybrid" positioning Figure 1 shows an example of the evolution of his concept over the years, with the number of new technologies used for positioning increasing over time."*[2]

**B. Industry Standards and Best Practices Will Continue to Ensure the Accurate and Reliable Transmission of 911 Caller Information**

The Commission seeks comment on a number of issues concerning the transmission of 911 caller information, including whether legislation is necessary to require "measur[ing] accuracy and efficiency" of such information, and to authorize new Commission data collection requirements. Public Notice at 5. As discussed above, industry standards under development will improve location accuracy transmission of 911caller location information to include the potential to better and more accurately report building height/floor location for NG911 services and networks. Such enhanced accuracy and efficiency should be addressed through the industry standards processes and through service provider and PSAP best practices that the FCC should now be asked to evaluate the potential benefits to incorporate altitude and height of building reporting data along with other proven location postal mail address data coordinates for calls initiated on mobile cell phone devices, increasingly equipped with the sensors to collect and report this data, into its proposed regulatory framework to take advantage of the new sensor technology platform and industry location intelligence mapping and reporting data that can now expand to report not just caller location, but where in the building (e.g., 14th to 16th floor based on altimeter (A/K/A pressure or barometric MEMS sensor) data reporting.

The views expressed here are strictly my own personal and independent views and not affiliated with any third party or entity other then XYverify Corp.

Respectfully submitted,

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